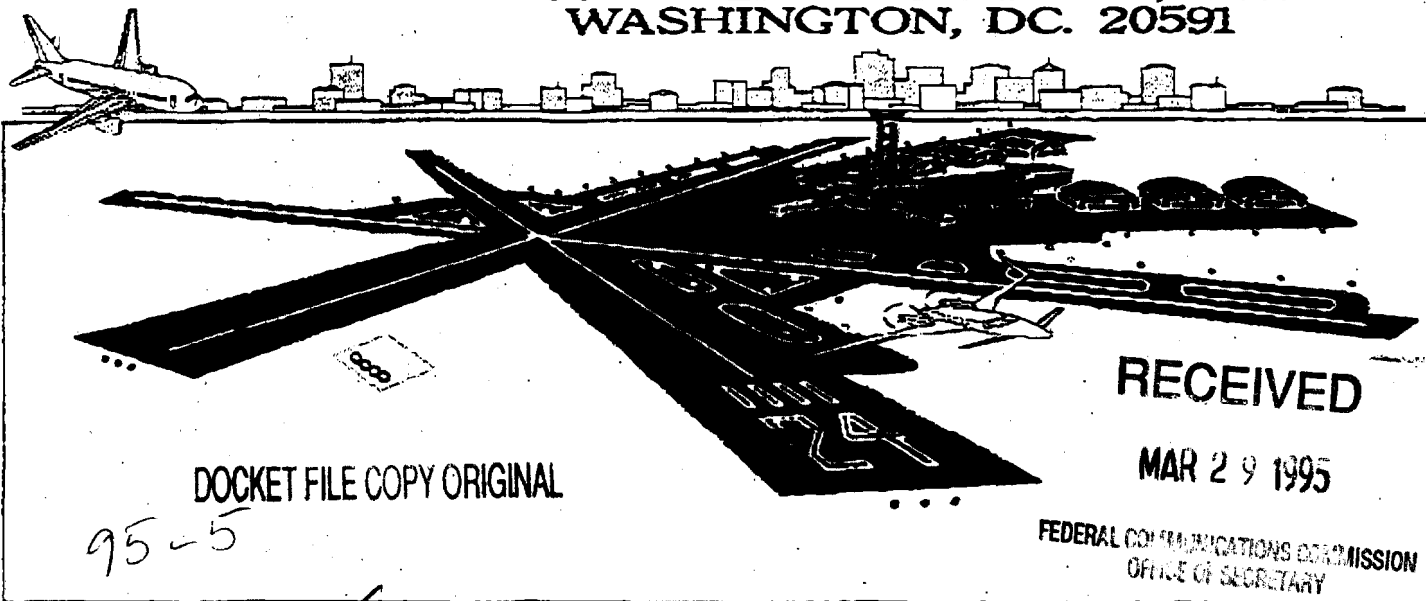




# ATP-200

## FAX COVER SHEET

FEDERAL AVIATION ADMINISTRATION  
AIRSPACE RULES AND AERONAUTICAL  
INFORMATION DIVISION.  
800 INDEPEDENCE AVE, SW.  
WASHINGTON, DC. 20591



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COMMENTS:

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U.S. Department  
of Transportation

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WT 95-5  
**Memorandum**  
**RECEIVED**

MAR 29 1995 DOCKET FILE COPY ORIGINAL

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

Subject: **ACTION:** Comments on Notice of Proposed  
Rulemaking - Federal Communications  
Commission Part 17

Date: MAR 28 1995

From: Manager, Airspace-Rules and  
Aeronautical Information Division, ATP-200

Reply to  
Attn. of:

To: Chief, Enforcement Division

On January 20, the Federal Communications Commission (FCC) released a notice of proposed rule making (NPRM), proposing, in part, to revise Part 17 of its rules to update its antenna marking and lighting requirements. In brief, the FCC is proposing to revise its rules to incorporate by reference (IBR) the marking and lighting recommendations contained in certain Federal Aviation Administration (FAA) advisory circulars (AC 70/7460-1H and AC 150/5345-43D). The NPRM states that the FCC is currently seeking authorization from the Director of the Federal Register to "IBR" the two FAA advisory circulars. The FCC states on page 12 of the NPRM:

Incorporating the Advisory Circulars (AC) directly eliminates the need for Commission staff to identify changes to the Circulars, interpret such changes, and revise Part 17 to include the new language. In the future, if the FAA makes substantive amendments to either of the Advisory Circulars, the Commission may initiate a notice and comment proceeding to incorporate the new version of the Circular.

The FCC is also proposing to "grandfather" the present painting and lighting requirements of existing structures for 10 years, "because there are differences between the current FAA Advisory Circulars and Part 17." Also, each owner registering an antenna on or after January 1, 1996, would be subject to the painting and/or lighting requirements referenced in Part 17 at the time of registration. Nevertheless, if the Commission amended Part 17 to reflect updated FAA Advisory Circulars, the owner could continue to paint or light the antenna in accordance with the old requirements for an indefinite period.

### DISCUSSION

A public rulemaking docket may not be the most appropriate place for the FAA to voice its concerns about the NPRM. When the FCC proposed certain aviation receiver standards in 1993, we discussed our concerns informally with the General Counsel's office.

The NPRM refers to AC's that are currently being revised by the FAA (draft AC 70/7460-1J was distributed for comment to various FAA offices in June 1994). In short, this "new rule" could reference outdated information as soon as it is published.

The NPRM states that, in certain instances, owners voluntarily paint or mark their antenna structures (even though its not recommended by the FAA or required by the FCC). What portion of the FAA's AC's, as IBR in the FCC's rules, would govern these structures? Specifically, section 17.23 of the FCC's proposed rules states that each antenna structure registered after January 1, 1996, must conform to the FAA's marking and lighting recommendations set forth in the structure's "no hazard" determination. If the FAA has not prepared a "no hazard" determination for a structure, how should the owner mark or light the structure?

Section 17.25 of the FCC's proposed rules specifies three different options for painting and lighting existing structures (the "grandfather provision"). This section is problematic because if the Commission amends Part 17 to reflect updated FAA AC's, the owner could still paint or light the antenna in accordance with the old requirements for an indefinite period. Also, "grandfathering" the painting and lighting requirements for 10 years seems like an inordinate amount of time, especially if the standards are changing.

#### COMMENTS

The word rule making should be one word.

Page 2, par. 3, line 4: "nearby airport runway" should be amended to include seaport lanes, helicopter pads.

Page 3, par. 4, line 7: "Coordinates" should be defined as degrees, minutes, seconds and hundredths of seconds. "Height" should be to the nearest foot and include ground elevations above mean sea level, height of the structure above ground level (AGL) including all antennae on the structure (AMSL), and AMSL height of the structure with the tallest antenna to the nearest foot. In both cases these would be obtained by a required survey to certain degrees of accuracy. With the use of Global Positioning System survey equipment becoming more common, this should not present an undue burden. This would eliminate the need for accuracy code additions, which raise minimums on instrument approaches.

Page 4, para. 5 line 7: The FAA does not recommend marking and/or lighting on structures which has been determined to be a hazard to air navigation.

Page 4, para. 5 line 8. Change sentence to read "The FAA, however, has no authority to require compliance with its marking and lighting recommendations."

Page 4, par. 6: "structure height." Terminology should be consistent.

Page 5, note 15, line 2: "above ground level" when first used should be followed by (AGL).

Page 10, Paragraph 16:

- a). We would like to see the registration of all antenna structures. This is so that when someone reports a problem with a tower, we would be able to determine who the owner is and what the marking and lighting requirements are.
- b). On line access for FAA and National Oceanic Service (NOS). CD-ROM every 6 months.
- c). No comment.
- d). At least every 10 years they need to be renewed. The advantage is that the owners will be reminded of their obligations and everything should be verified.
- e). We feel that a filing fee is justified provided it does not interfere with what we are trying to accomplish.
- f). The only way to effectively do our job is to have all the information. Registration should included all frequencies which could cause electromagnetic interference.
- g). Receipt of the antenna structure registration and a letter to the owner, would be most effective.
- h). No comment on the environmental requirements.
- i). We would like to have information to the nearest foot. In addition, we need horizontal data to the nearest tenths or hundreds of second if possible..

Page 11, par. B. 17, line 1: Change sentence to read: "In general, parties who intend to construct or modify antenna structures must provide notice to the FAA to determine whether the structure would be a hazard to air navigation.

Page 11, para. B. 17, line 3: Again, the FAA does not recommend marking and/or lighting on structures which have been determined to be a hazard to air navigation.

Page 13, para. C.21, line 15: "Under this proposal, antenna structure owners who fail to comply with the requirements set forth in Part 17 may be subject to administrative sanctions." We believe this statement is too weak, unenforceable, and will not enhance aviation safety. The whole point of marking and lighting antenna structures is to assist pilots in seeing and avoiding the structure. When structures are not marked and lighted in accordance with FCC requirements (FAA recommendations) they

can be very hazardous to flight operations. This is especially true in the case of unlighted structures. The FAA issues Notices to Airmen (NOTAM's) to inform pilots of unlighted structures. That is the only way pilots become aware of unlighted antenna structures that they can't see and avoid, especially at night. Even in the best of situations this notification is limited to the pilot receiving the information and being familiar with the location and able to navigate well clear of the antenna. Administrative sanctions will not solve this problem in a timely manner. Part 17 must be more specific and enforceable. By the time FCC makes contact with multiple licensees and the owner, and after receiving promises or no response at all, an excessive amount of time will elapse with little possibility of the structure.

Page 13. Footnote 13. Licensees need to be informed that when submitting Form 7460-1 to the FAA, there should be a note/remark advising that the request is for a marking and/or lighting study only.

Section 1. 61 "Procedures for handling applications requiring special aeronautical study."

(1). Delete the word "special" from the heading and, after "study", add "... by the FAA based on CFR 14 Part 77".

The word "special" connotes an unprecedented situation but the reality is that the procedure is mundane. The CFR citation is used to make clear that there is a basis in law for FAA's requirement.

Section 17. 4 (b) ("\*\*\*will be advised...")

(1). Add: "for a current alteration/proposal" after "...FAA Form 7460-1..."

To some proponents the words: "...has already been filed." at the end of the sentence mean the original filing which may be a date in excess of 20 years. They are often disturbed when FAA's response indicates that the prior study was for a specific set of parameters and does not apply to subsequent proposed alterations. FAA airspace evaluations are concerned with the modification of any parameter, which includes site data and the electromagnetic "footprint".

Section 17.5 (a)

Change:

"...lighting arrester" to "...lightning arrester"

Page 23, par 17.14(b)(2): Add: One that would increase the height of a building or structure when that building or structure has been the subject of a previous obstruction evaluation by the FAA. The reason this

addition is necessary is that many buildings, water tanks and other structures are submitted to the FAA for aeronautical study. The result of these studies may be that the proposal is constructed to achieve the maximum height permitted, within inches, but yet not effect instrument flight rules (IFR) altitudes or penetrate airport imaginary surfaces which could drastically effect airport development. Many proposals are negotiated down to a very specific height limit so as not to cause an adverse effect on aeronautical operations. We, therefore, feel it is necessary to include (as stated above) structures that have been previously studied by the FAA and found to be acceptable (No Hazard) for aeronautical requirements. The addition of any structures or antennas without notice, regardless of height, could have a significant adverse effect on aviation safety and aeronautical procedures and would be unacceptable to the FAA. Therefore, notification is required.

#### Section 17.23

In the first sentence, delete the letter "H" following the Advisory Circular "AC 70/746-1". This is a sequence number and will change as revisions are made. This logic would also apply to AC 150/5345-43.

In the third sentence, delete the words "...pose a potential hazard to air navigation." Substitute: "...either (a) exceed 200' above ground level or (b) exceed obstruction standards but are not a hazard to air navigation or (c) because of its particular location."

Obstruction lighting is not associated with a "potential" hazard to air navigation. A structure is either a hazard or it is not.

#### Section 17. 26 Voluntary lighting of antenna structures.

We discourage authorizing voluntary lighting of any antenna structure. Individual selection of medium intensity lighting or red lighting in the vicinity of an airport may place that person in violation of Section 902 of the FAA Act of 1958, as amended, which forbids the display of any lighting which might be mistaken for a "true light or signal." FAA uses the aeronautical study as a vehicle to professionally evaluate the individual need for obstruction marking and lighting.

#### General Remarks:

It should be made clear when an application is made for an obstruction evaluation study, that the height includes all antennas, air conditioners, elevator shafts, etc.

Environmental assessments should also be required for the use of medium-intensity as well as high intensity strobes.

Requiring a survey for structures (to 2C accuracy) upon registration would eliminate a large amount of work for the FAA, and most probably, for the FCC and NOS.

A program should be instituted to encourage sharing of tower structures. The proliferation of towers is making flying more hazardous, especially for helicopters.

The FAA has been advised of the hazard of unlighted towers between two taller lighted towers. Caution should be taken whenever a request is received to extinguish lights on towers.

#### INSTRUCTIONS FOR COMPLETION OF FCC FORM 854

##### **Item 2 (last par.)**

Add the word "current" between the words "a" and "copy" to ensure that the proponent understands the necessity of having a contemporary evaluation accomplished by FAA.

Eliminate the "Other" category to ensure that only North American Datum (NAD) is submitted. In the past, we have received proposals referenced to the City of Chicago datum. FAA and FCC work only in NAD.

Item 3 of Form Instructions indicate that FCC requires NAD referenced either from a map or GPS; therefore no other datum should be acceptable.

##### **Box 9**

Insert the words "a current" after the word "Has" as FCC has done in BOX 2 regarding marking and lighting. Once again, FAA does not wish the proponent to use an archaic study in an antenna licensing endeavor which may interfere electromagnetically with FAA navigation and communication frequencies.

##### **FAA ADDRESSES**

Correct the following:

**Alaskan Regional Office**  
**Air Traffic Division, AAL-530**  
**222 W 7th Ave #14**  
**Anchorage, AK 99513-7587**  
**Phone: (907) 271-5893**  
**Fax: (907) 271-2850.**

Great Lake's telephone number: (708) 294-7568.

**HOW AND WHERE TO NOTIFY FAA**

Change the word "Chief" ("of the Air Traffic Division") to "Manager".

On the DRAFT Antenna Structure Registration you might consider putting an expiration date on the form.

If the FCC revisions become reality, the System Management Branches, nation-wide, can expect a deluge of requests from "owners" for copies of old determinations. Most of these determinations will be destroyed because of our record retention process. Hopefully, we will be able to work with FCC to either grandfather these types or have FCC supply FAA determinations retained in FCC records.

Question to FCC - Will each antenna structure in an array have its own unique owner's number and site data?

Hopefully, this FCC antenna registry will eliminate the proliferation of towers and that FCC, FAA, and NOS could work with one tower database.



Harold W. Becker